AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph on page 1, line 24-page 2, line 3 with the following amended paragraph:

First, the three R, G, B CRTs 11, 12, 13 are not arranged at the same position but rather are arranged side by side. Each R, G, B CRT 11, 12, 13 enlarges a received image and outputs it to the reflector 14. The reflector 14 displays the enlarged image on the screen 15. Accordingly, the screen 15 displays a certain enlarged color image.

Please replace the paragraph on page 3, lines 7-12 with the following amended paragraph:

Accordingly, in the reference grid image 21, because the three CRTs 11, 12, 13 are not installed at the same position but rather are arranged in parallel, a degree of the keystone and pincushion distortion is different at the top, bottom, right and left of an image, ~~due to that~~ because the image can not be displayed at the same point of the screen 15, and accordingly a misconvergence phenomenon occurs. Because of that problem, picture quality of the projection TV is lowered.

Please replace the paragraph on page 4, lines 8-13 with the following amended paragraph:

In addition, because the correcting apparatus using the convergence yoke uses variation of a magnetic field by adjusting a current received to the convergence yoke 32, it is influenced by the earth magnetic field, and accordingly re-correction is required after performing the distortion

correction. In that case, a product has to be re-called, it is not efficient for not only a user but also a manufacturer.

Please replace the paragraph on page 10, lines 9-18 with the following amended paragraph:

First, when the reference image is $I(x,y)$, the image processing unit 41 performs inverse distortion-processing of the reference image $I(x,y)$ and outputs it to the CRT 42. Herein, when a function for modeling the image distortion process mathematically is T and a function for modeling the inverse-distortion process mathematically is T^{-1}, the inverse distortion-processed image is $T^{-1}[I(x,y)]$. Accordingly, the CRT 42 outputs the inverse distortion-processed image $T^{-1}[I(x,y)]$ to the projection [[44]] 43, and the projection 43 displays the inverse distortion-processed image [[is] $T^{-1}[I(x,y)]$. Herein, because image distortion occurs while displaying the image on the screen, an undistorted reference image $I(x,y)$ described as $T\{T^{-1}[I(x,y)]\} = I(x,y)$ is displayed.

Please replace the paragraphs on page 11, line 5-page 12, line 7 with the following amended paragraphs:

First, the projection TV unit 510 includes analog video signal units 51a, 52a, 53a and digital video signal units 51b, 52b, 53b for receiving video signals; analog/digital converters 54a, 54b, 54c for converting analog video signals into digital video signals; multiplexers 55a, 55b, 55c for selecting one of output signals or one of digital video signals outputted from the analog/digital ~~converts~~ converters 54a, 54b, 54c; a distortion corrector 56 for performing

inverse-distortion processing of the signals outputted from the multiplexers 55a, 55b, 55c on the basis of inverse-distortion correcting information; a memory 57 for storing the inverse-distortion correcting information (parameter); [[a]] an image projection processor 58 for receiving an inverse-distortion-processed signal from the distortion corrector 56; and a screen [[50]] 59 for displaying the inverse-distortion-processed signal outputted from the image projection processor 58.

The projection TV unit 510 receives the analog video signals and the digital video signals. Herein, the analog video signals are converted into digital video signals by the analog/digital ~~converts~~ converters 54a, 54b, 54c. Each ~~multiplexers~~ multiplexer 55a, 55b, 55c selects one of the signals outputted from the analog/digital converts 54a, 54b, 54c or one of the video signals outputted from the digital video signal units 51b, 52b, 53b and outputs it to the distortion corrector 56. The distortion corrector 56 performs a keystone inverse-distortion and pincushion inverse-distortion processing process of the outputted video signal on the basis of the inverse-distortion correcting parameter stored in the memory 57 and outputs it to the image projection processor 58. The image projection processor 58 displays the keystone inverse-distortion and pincushion inverse distortion-processed signal on the screen 59. Herein, when the video signal is displayed on the screen 59, keystone distortion and pincushion distortion occur inevitably. Accordingly, when the inverse distortion-processed video signal is displayed on the screen 59, the original image not affected by the keystone distortion and the pincushion distortion is displayed on the screen 59.

Please replace the paragraph on page 12, lines 8-16 with the following amended paragraph:

Next, the inverse-distortion information generator 520 includes a reference image generator 61 for generating a reference image, outputting it to the image projection processor 58 and setting a coordinate of the reference image; a displacement measurer 62 for measuring a coordinate of the keystone distortion and pincushion distortion-occurred image when the reference image is displayed on the screen; and a ~~distorted~~ distortion information extractor 63 for extracting image distortion information on the basis of the image coordinate outputted from the reference image generator 61 and the displacement measurer 62 and outputting it to the memory 57.

Please replace the paragraph on page 13, lines 12-17 with the following amended paragraph:

Accordingly, the obtained inverse-distortion information is stored in the memory [[59]] 57 of the projection TV unit 510. Afterward, because the projection TV unit 510 can predict distortion occurred in displaying of the image on the screen on the basis of the inverse-distortion information of the memory 57, it performs pre-warping of the image, and finally the distortion–corrected image is displayed on the screen 59.

Please replace the paragraph on page 15, line 23-page 16, line 12 with the following amended paragraph:

Figure 6 is a block diagram illustrating an image distortion correcting method in accordance with the present invention. As depicted in Figure 6, when a grid image is displayed

on the screen, on the basis of a keystone distortion parameter approximately extracted from the displayed grid image, the grid image is inverse keystone distortion-processed and is displayed on the screen, and accordingly an approximately keystone distortion-corrected image is displayed on the screen. Afterward, by extracting [[a]] an image coordinate again from the keystone distortion-corrected image, a pincushion distortion parameter is obtained. On the basis of the obtained pincushion distortion-parameter, the grid image is inverse pincushion distortion-processed and is displayed on the screen, and accordingly an approximately pincushion distortion-corrected image is displayed on the screen. As described above, by repeating the distortion correcting process alternately, a distortion parameter value more accurate than a previous distortion parameter value can be obtained. Accordingly, a keystone distortion parameter value and a pincushion distortion parameter value are updated gradually.

Please replace the paragraph on page 18, lines 11-14 with the following amended paragraph:

As depicted in Figure 9, the keystone distortion modeling is performed by a method same with the pincushion distortion modeling and ~~ea~~ can be described as following Equation 4. In more detail, when a straight line connecting (0,0,R) and (x1,y1,fk(x1,y1)) is l_1, a cross point of the l_1 and the XY plane is (u, v).

Please replace the paragraph on page 20, lines 8-21 with the following amended paragraph:

As depicted in Figure 10, the three-dimensional virtual screen technique includes

initializing a virtual screen as following Equation 7 on the basis of the coordinate (x, y) of the reference image and the coordinate (u, v) of the distorted image as shown [[a]] at step S101; generating an inverse-distorted image $I_p(x, y)$ on the basis of the initialized virtual screen [[a]] as shown at step S102; displaying an image $I_w(x,y)$ distortion-corrected on the basis of the generated inverse-distorted image on the screen as shown at step S103; judging whether the image $I_o(x, y)$ displayed on the screen ~~is coincided~~ coincides to the distortion-corrected image $I_w(x, y)$ as shown at step S104; updating the virtual screen when the image $I_o(x, y)$ displayed on the screen ~~is not coincided~~ does not coincide to the distortion-corrected image $I_w(x, y)$ as shown at step S105; and finishing the virtual screen updating when the image $I_o(x, y)$ displayed on the screen ~~is coincided~~ coincides with the distortion-corrected image $I_w(x,y)$. Herein, the virtual screen is updated in the step S105, and the steps are performed repeatedly starting from the virtual screen initializing step S101.

Please replace the paragraph on page 23, lines 11-17 with the following amended paragraph:

The silicon convergence device 112 performs distortion analysis of the digital [[r, g,]] R, G, B video signal received from the format converter 111 on the basis of the three-dimensional virtual screen technique, generates inverse-distortion information according to it and outputs a pertinent R, G, B signal to the format converter 111. Herein, the silicon convergence device 112 includes each construction part for generating a coordinate of a digital image, storing it and performing the above-mentioned interpolation.

Please replace the paragraph on page 28, lines 9-13 with the following amended paragraph:

The nearest interpolation performs interpolation by using ~~uses~~ a zero-dimensional interpolation function, the linear interpolation performs interpolation by using the one-dimensional interpolation function, and the three-dimensional interpolation performs interpolation by using a three-dimensional interpolation function.